

WILDLIFE HARVEST AND POPULATION STATUS REPORT

RING-NECKED PHEASANT - 2005

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2004-05 PHEASANT HUNTING SEASON

In 2004, 11,863 pheasant hunters killed 25,655 pheasants statewide; a 1.1% decrease in hunters and a 14.1% decrease in harvest from 2003. The estimated 2004 pheasant harvest decreased 26.6% from the 5-year average (1999–03; 34,955 average harvest; SD 8,206) and decreased 49.1% from the 10-year average (1993–02; 50,443 average harvest; SD 18,068). In 2004, pheasant hunters averaged 0.60 birds per day and 3.92 days per season compared to 0.46 birds per day and 5.44 days per season in 2003. Average season bag for 2004 was 2.16 birds which was a 13.3% decrease compared to 2003. Regional harvest data for 2004 showed Northwestern Prairie had the highest estimated harvest (10,750 birds) and Mississippi Lowlands the lowest (158 birds; Figure 1). During 2004, Northwestern Prairie had the greatest number of hunters (5,277) with Mississippi Lowlands the lowest (160); hunters in north Missouri spent 5.31 days pheasant hunting compared to 1.25 days in the Mississippi Lowlands.

2005 POPULATION SURVEYS

The Department annually cooperates with more than 450 rural mail carriers in mid-April to monitor the relative distribution of spring pheasant populations in northern and southeastern Missouri; these data also provide a relative with-in year distribution range map. The 2005 Rural Mail Carrier Survey (RMCS) reported 412 pheasants with an index of 1.09 birds per 100 miles (Figure 2).

The August Roadside Survey (ARS) monitors the number of pheasants and pheasant broods observed along standardized 30-mile routes, and has provided a fairly reliable predictor of fall pheasant harvests in previous years. The 2005 statewide results for the number of pheasants observed showed a 104.3% increase compared to 2004, a 74.0% increase compared to the 5-year average (2000-04), and a 16.6% increase from the 10-year average (1995-04; Table 1; Figure 3). Pheasant production in 2005, as determined by the number of broods observed, increased 110.5% compared to 2004, increased 106.2% compared to the 5-year average (2000-04), and increased 29.0% from the 10-year average (1995-04; Table 1). Regionally, Northwestern Prairie had the highest index of pheasants observed (6.44 birds/30 miles) and Mississippi Lowlands the lowest (0.00 birds/30 miles).

During 1988-04, there was a strong relationship ($r=0.85$) between ARS and fall pheasant harvest indicating that ARS may often provide a relatively good predictor of harvest for the upcoming fall season (Figure 3). With this in mind, statewide 2005 pheasant hunting opportunities are expected to be noticeably improved compared to the 2004 season, and better than the previous 5- and 10-year averages. Expect hunting opportunities to be best in the Northwestern Prairie, below average in the Northern

Riverbreaks, above average in the Northeastern Riverbreaks, and poor in the Mississippi Lowlands. Although increases in some areas around the state were observed this year in the number of pheasants and pheasant broods (Table 1), these relative trend values are still near or just slightly above 10-year averages. Comparable data from Iowa's August Roadside Survey for 2005 showed 35.9 birds/30 mile route, so caution should be exercised when interpreting the increases in Missouri from this year (2.9 birds/30 mile route). Hunting opportunities will vary depending upon severe localized weather events during the nesting and brood-rearing season, and the resulting effects of those weather conditions on habitat.

PHEASANT RANGE EXPANSION PROGRAM

The Department attempted to expand the pheasant range in 14 northern Missouri counties by relocating wild trapped birds during 1987-00; all 23 targeted sites have been completed (Table 2). Evaluation data indicates mixed results. Some release sites showed relatively high numbers of crowing males along survey routes adjacent to the release sites, and showed some birds expanding into surrounding areas. Some releases showed relatively show relatively good numbers of birds around the release site, but the birds did not become numerous enough to be observed by rural mail carriers. Other release sites showed perpetually low numbers of birds that never disappeared, but never established thriving wild populations. Some releases were classified as failures for various reasons.

Table 1. The number of pheasants and broods observed along 30-mile routes in August by zoogeographic region, and relative change through time.

Zoogeographic Region	2004	% Change From 2004	% Change From 5- Year Mean (2000-04)	% Change From 10- Year Mean (1995-04)
Northwestern Prairie	6.44	84.0	98.4	63.6
Total Pheasants	0.94	88.0	139.8	76.0
Northern Riverbreaks	1.29	-59.7	-46.9	-57.0
Total Pheasants	0.14	-65.0	-53.3	-63.8
Northeastern Riverbreaks	2.84	35.2	99.2	34.2
Total Pheasants	0.37	23.3	110.2	51.6
Mississippi Lowlands	n/a	n/a	n/a	n/a
Total Pheasants	n/a	n/a	n/a	n/a
STATEWIDE	2.86	104.3	74.0	16.6
Total Pheasants	0.40	110.5	106.2	29.0

Table 2. Release sites and numbers of wild-trapped pheasants per release, 1987-00.

RELEASE AREA	COUNTY	COMPLETED	NO. BIRDS (M:F)	SOURCE OF BIRDS
Novelty	Knox	1989	226 (66:145) (15 unk. sex)	Squaw Creek NWR Nebraska
*Franklin Island	Howard	1989	178 (58:120)	Squaw Creek NWR Mar. Tem. Clair CA
New Cambria	Macon	1990	100 (30:70)	Kansas
*Ardmore	Macon	1990	138 (53:85)	Squaw Creek NWR Kansas
Hannibal	Marion	1990	123 (22:101)	Squaw Creek NWR Bilby Ranch CA Bob Brown CA
Smileyville	Marion	1990	97 (21:76)	Kansas
Kaseyville	Randolph Macon	1991	143 (34:109)	Nebraska
Clifton Hill	Randolph	1991	144 (34:110)	Nebraska
Bethel	Shelby	1991	143 (33:110)	Bilby Ranch CA Grand Pass CA Bob Brown CA
Glasgow	Howard Chariton	1991	141 (27:114)	Kansas
Salisbury	Chariton	1991	135 (25:110)	Kansas
Rothville	Chariton	1993	112 (19:93)	Bob Brown CA South Dakota
Mendon	Chariton	1993	135 (38:97)	South Dakota Mo. Private Land
Bogard	Carroll	1993	123 (33:90)	South Dakota
Roads	Carroll	1993	121 (23:98)	South Dakota Mo. Private Land
Plymouth	Carroll	1994	176 (23:153)	South Dakota Mo. Private Land
Regal	Ray	1994	219 (39:180)	South Dakota
Stet	Ray	1994	179 (54:125)	South Dakota
Braley	Clinton	1996	141 (28:113)	South Dakota
West Keystone	Clinton	1996	165 (27:138)	South Dakota
Starfield	Clinton	1996	173 (40:133)	South Dakota
Plattsburg	Clinton	1996	156 (19:137)	South Dakota
Wexford	Clinton	2000	116 (32:84)	South Dakota

*Release sites classified as “failures.”

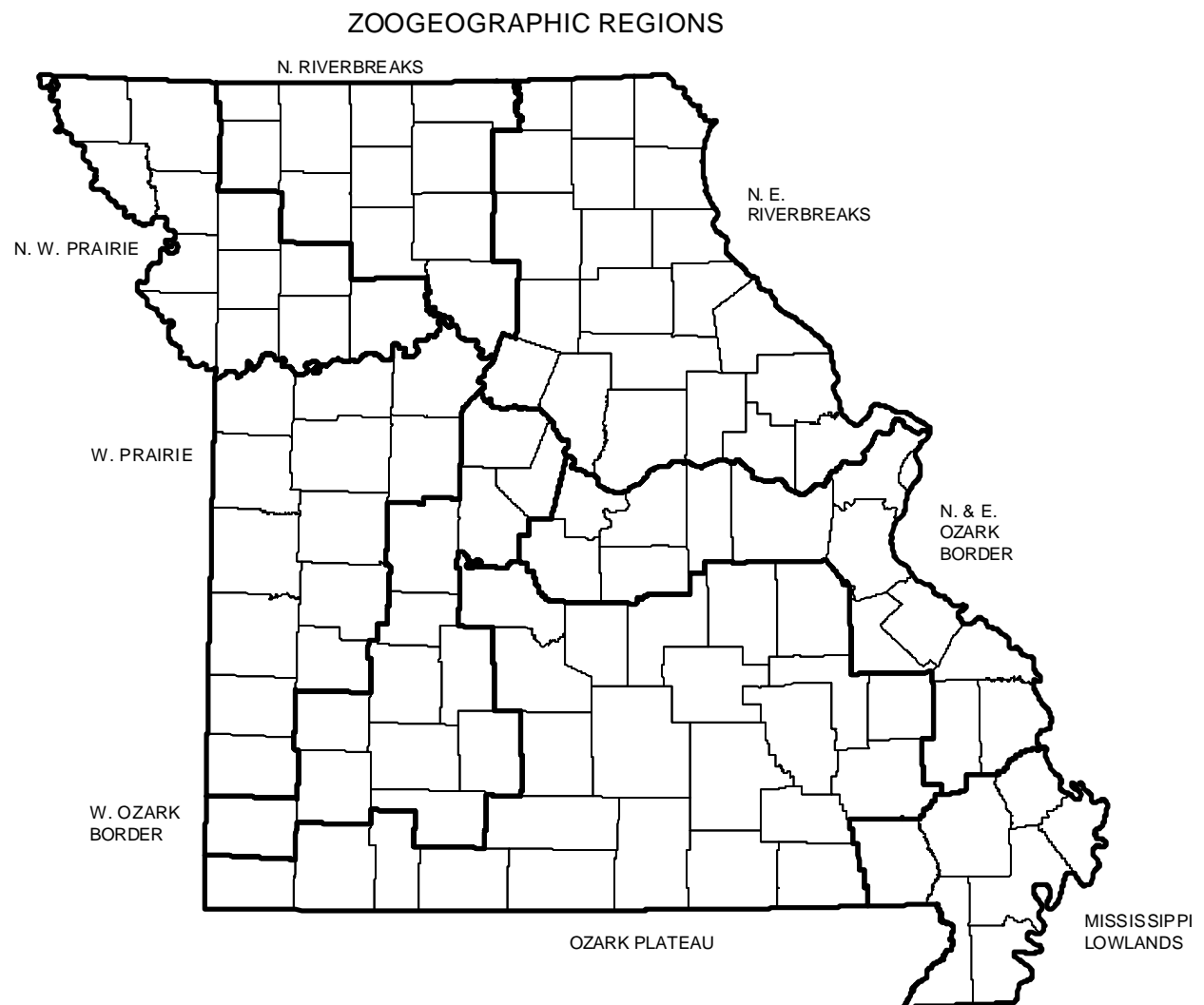


Figure 1. Zoogeographic Regions of Missouri.

2005 MISSOURI SPRING PHEASANT DENSITIES

FROM RURAL MAIL CARRIER SURVEYS

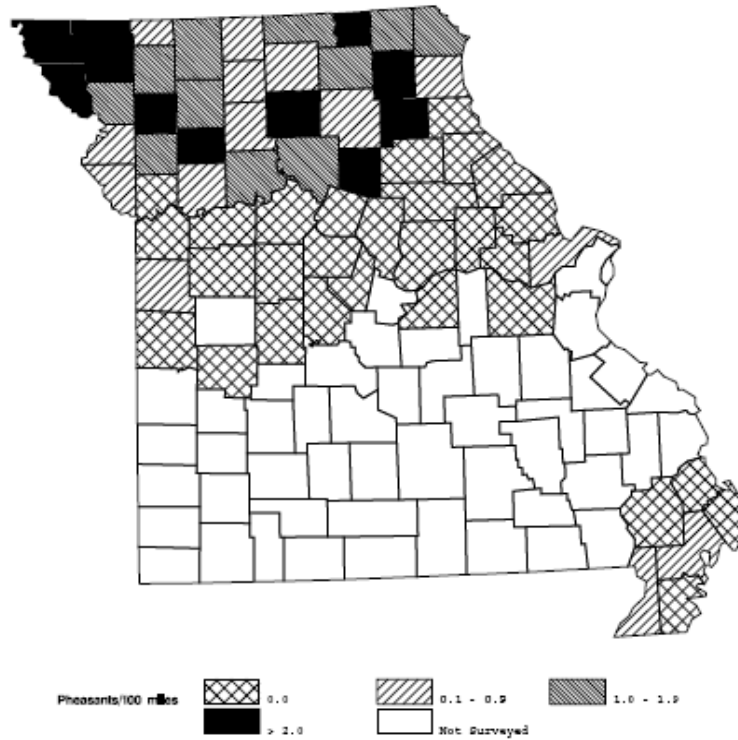


Figure 2. Relative distribution of Missouri spring pheasant populations derived from rural mail carrier surveys, during April 2005.

Missouri Pheasant Trends

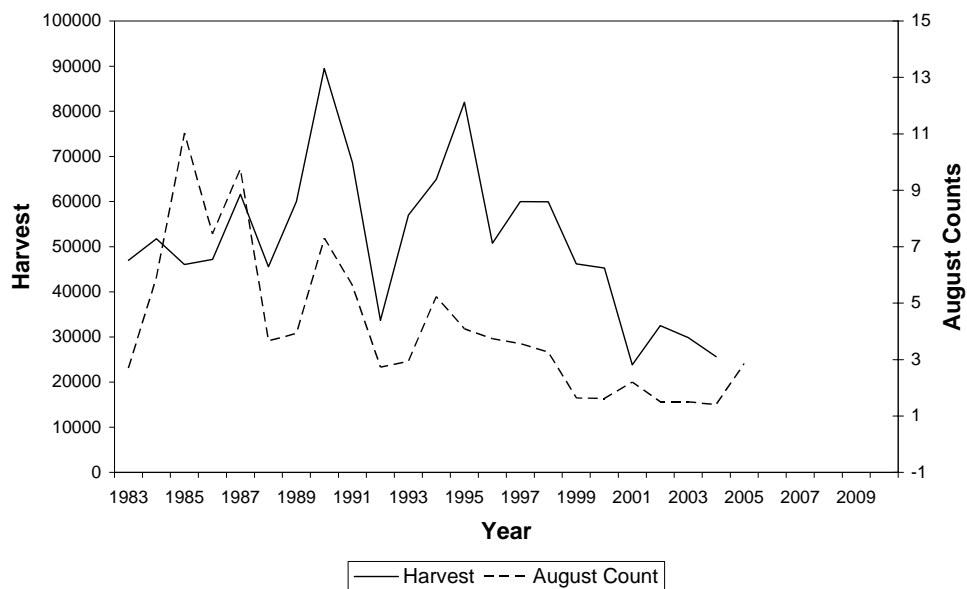


Figure 3. Estimated Missouri pheasant harvest and population trends from August Roadside Counts, 1983-05.